

# HOW HEALTHY IS YOUR HOME? Healthy Homes, Healthy Families...

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Healthy Homes & Lead Poisoning Program - 1.800.897.LEAD

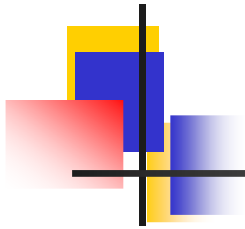




# Why Do We Care About Healthy Homes?

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- Young children spend **nearly 80-90%** of their time indoors.
- Housing affects health both **directly & indirectly.**
- Health problems encountered as child **can last a lifetime.**
- We can **no longer afford** to not address health & housing.



## A Case for Change...

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The **total annual cost** for certain childhood environmental diseases in the *New Hampshire* are more than **\$1.04 billion** dollars per year.

- **>\$89 million** for **lead** poisoning for school age children
- **\$46 million** for **asthma**
- **\$299 million** for **non-fatal injuries**
- **\$608 million** for **smoking** related illness

# There is **NOTHING NEW** About the Link Between **HEALTH & HOUSING**

~ *Florence Nightingale*  
(1820-1910)

“The connection between health and the dwelling of the population is one of the most important that exists”





# The Seven Principles of a Healthy Home

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Keep it...

- Dry
- Clean
- Ventilated
- Pest-Free
- Safe
- Contaminant- Free
- Maintained

# Keep it Dry

- Interior Leak
  - Refrigerators
  - Tubs, showers & sinks
  - Air conditioners
  - Washing machines
- Exterior Leaks
  - Cellar leaks
  - Window condensation
  - Missing kitchen & bathroom fans
  - Roof leaks
  - Chimneys



# How Does Moisture Affect Your Health?

- Coughing
- Wheezing
- Asthma symptoms
- Tendency to catch pneumonia





**Water damage**



**Mold**



**Asthma Exacerbation**

**What can a little  
water damage  
mean to your  
health?**



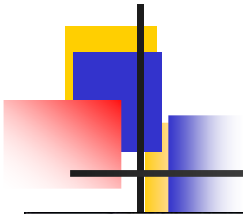
# What Can Water Damage Lead To?



Water damage ➡



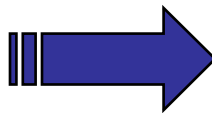
Structural Damage



**Bugs**



**Mice &  
rats**



**Lead**



**Structural damage can  
lead to**



**Fire**



**Injuries**







**Bugs, Mice & Rats lead to...**



**Pesticide use**



**Asthma & Allergy  
exacerbation**



# What Can We Do To Eliminate Leaks?

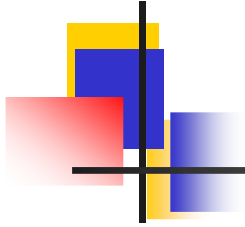
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- Repair the roof
- Seal foundation cracks
- Re-grade the landscape sloping away from foundation
- Repair small plumbing leaks
- Install outside drainage

# Keep it Clean

- Pesticides and other chemicals
- Heavy metals such as lead
- Pest droppings & urine
- Chemical contaminants
- Household trash
- Allergens





# Where Does Dust Come From?

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**It comes from 3 places...**

- Brought in from the outside
- Made by the occupants
- Made by the structure of the home





# What Dust is Brought In From The Outside?

- Dirt from driveway or yard
- Residue or debris from your job
- Pollen from plants and trees
- Combustion by-products from cars & trucks



# What Dust is Made By the Occupants?

- Excess garbage
- Excess clutter
- Tobacco smoke
- Pet hair & dander





# What Dust is Made by the Building?

- Lead paint dust
- Dust mites
- Asbestos fibers
- Pest droppings and urine

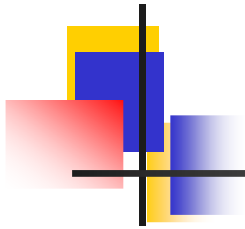




# What Can You Do to Keep it Clean?

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- Use a door mat at the door
- Take your shoes off in the house
- Eliminate the clutter so it is easy to clean
- Choose flooring that is easy to clean
- Buy a HEPA vacuum
- Keep pets out of bedrooms
- Don't dry dust or dry sweep
- Everything should have a place & there is a place for everything



# Keep it Ventilated

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- Pollutants are 2 to 5 times higher indoors than outdoors
  - Radon
  - Moisture
  - Environmental tobacco smoke
  - Particulate matter
  - Allergens
  - Mold
  - Carbon monoxide
  - Volatile Organics



# What are Combustion Contaminants?

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- Carbon monoxide
  - The “silent killer”
  - Fatigue, headaches, dizziness & confusion
  - 300 deaths a year in the U.S.
- Nitrogen dioxide
  - Eye, nose & throat irritation
  - Shortness of breath
- Moisture
  - Damp indoor environments

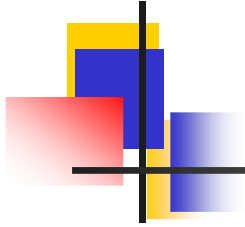


# What Can You Do to Reduce Combustion Contaminants?

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## Do Not...

- Do not use the oven to heat your home
- Do not use a generator in the home or too close to the home
- Do not leave your car running in the garage
- Do not use vent-less heaters or fireplaces
- Do not barbeque in the house



# Keep it Pest Free

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## Health effects associated with pesticides use...

- Eye, nose or throat irritation
- Skin rashes, stomach cramps, nausea
- Central nervous system damage
- Kidney damage
- Increased risk of cancer

# What Can You Do to Reduce Pests in Your Home?

- Reduce the food & water left out that pest can get into
  - Crackers, cereal & other dry products
  - Don't leave dirty dishes in the sink over night
  - Get rid of moisture in kitchen & bathroom
  - Clean grease & food off of the stove
  - Dog food





# What Can You Do to Reduce Pest in Your Home?

- Keep them out and give them no place to hide
  - Change surrounding landscape (i.e bark mulch, bushes)
  - Block hiding places, entryways and passages





# What Can You Do to Reduce Pest in Your Home?

- Eliminate them all together
  - Traps
  - Appropriate pesticides
  - Throw out infected furniture





# What Can You Do to Keep it Safe?

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## In the Kitchen...

- Keep hot water heater between 120 –125 F
- Install a smoke detector
- Install child locks on cabinets
- Secure or eliminate area rugs
- Do not use extension cords near sinks
- Outlets near sinks need to be GFI



# What Can You Do to Keep it Safe?

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## In the Bathroom...

- Secure or eliminate area rugs
- Install hand railing in the bathroom for elderly
- Secure medicine away from children
- Outlets near the sink need to be GFI
- Get rid of the radio and extension cords

# What Can You Do to Keep it Safe?

## In the Living room & Bedrooms...

- Change light bulbs to low energy bulbs
- Do not use excessive extension cords
- Do not use candles or incense
- Secure or eliminate area rugs
- Install a smoke detector





# What Can You Do to Keep it Safe?

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## In the Yard...

- Secure fence & gate to swimming pool
- Keep children away from chemicals in garage  
(gas, oil, antifreeze, paints, thinners, pesticides)

# Keep it Contaminant-Free

- Lead paint
- Tobacco smoke
- Radon
- Mold
- Carbon monoxide
- Asbestos
- Pesticides
- Volatile Organics
- Sewer gas



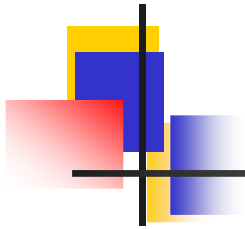




# What Can You Do to Keep it Contaminant-Free?

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- Do not smoke in the house
- Get rid of mold
- Get rid of chemicals in the home
- Contact a professional if you suspect Asbestos in the home
- Test your home for Radon
- Do not let any drains pipes (elbows) dry out



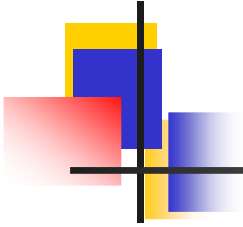
# Why Avoid Lead?

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## Related Health Effects...

- Reduced IQ
- Learning disabilities
- Impaired hearing
- Reduced attention span & behavior problems
- Anemia
- Kidney damage
- Central nervous system damage
- Coma, convulsions & death



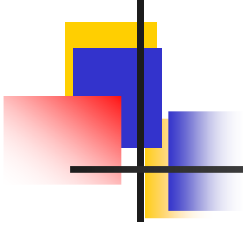


# Lead Sources

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## Related Health Effects...

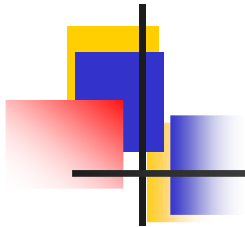
- Peeling and chipping paint
- Dust
- Soil
- Drinking water
- Certain pottery, cribs, jewelry & candle wicks
- Cultural items



# Keep it Maintained

- Inspect
- Clean
- Lubricate
- Replace
- Repair
- Organize





# Where to Get More Information

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- Healthy Homes & Lead Poisoning Prevention Program  
<http://www.dhhs.nh.gov/dphs/bchs/clpp/contact.htm>
- Centers for Disease Control & Prevention (CDC)  
<http://www.cdc.gov/healthyplaces/newhealthyhomes.htm>
- National Center for Healthy Housing  
<http://www.nchh.org/>